

IMPROVED MANGANESE DIOXIDE FOR ALKALINE CELLS

ABSTRACT OF THE DISCLOSURE

Particulate MnO_2 , having simultaneously a micropore surface area greater than $8.0 \text{ m}^2/\text{g}$, desirably between about 8.0 and $13 \text{ m}^2/\text{g}$ and BET surface area of between about 20 and $31 \text{ m}^2/\text{g}$ within the context of an MnO_2 having a total intraparticle porosity of between about $0.035 \text{ cm}^3/\text{g}$ and $0.06 \text{ cm}^3/\text{g}$ produces enhanced performance when employed as cathode active material in an electrochemical cell, particularly an alkaline cell. The average pore radius of the meso and macro pores within the MnO_2 (meso-macro pore radius) is desirably greater than 32 Angstrom .